REMARKS

In response to the action, Applicant has amended claims 1, 4, 6 and 8 and maintained withdrawal of claims 8 to 10 from consideration. Applicant respectfully requests reconsideration in view of the amendments and the following remarks.

Applicant confirms election of the Invention I slurry claims (1 to 7) with traverse and continues the withdrawal of the Invention II method claims (8 to 10) from consideration. Since the method claims of Invention II include the composition limitations of Invention I, Applicant respectfully requests reconsideration of the Invention II claims upon allowance of Invention I.

Applicant has amended claims 1, 4, 6 and 8 to more clearly define the invention. In particular, these claims include "the polynaphthalene surfactant being detectable in solution of the aqueous polishing slurry". The high concentration of negatively charged surfactant in relation to the positively charged particle facilitates control of the polishing slurry. The specification's paragraph 7 provides a basis for the amendment; and Applicant respectfully submits that the amendment enters no new matter.

The action rejects claims 1 to 7 under 35 U.S.C. § 103(a) as being unpatentable over Miura et al. (US Pat. No. 6,027,699). Miura et al. disclose the use of condensate of formalin with naphthalene sulfonic acid as an optional surfactant for use with fumed or colloidal silica. Applicant claims polynaphthalene surfactant for adsorption with metal oxide particles having a positive surface charge. For example, the polynaphthalene surfactant adsorbs onto alumina particles to reduce scratching of semiconductor substrates. The Miura et al. patent also does disclose the use of alumina sol, fumed titania and fumed zirconia as optional additives to the fumed or colloidal silica. The Comparative Examples and Examples all have basic pH levels

where silica particles have a negative charge. Furthermore, the Miura patent at Col. 6, lines 33 to 35 discloses that the compound usually has a pH of at least 7 so that it "stably" contains the basic compound—silica particles maintain their negative charge until pH levels of about 2 or less than 2—these pH levels are hazardous and not typically used for polishing. Applicant has discovered that adsorption of polynaphthalene surfactant onto positive charged abrasive particles can reduce scratching of semiconductor substrates. With its negative charge, the polynaphthalene surfactants will not adsorb onto negatively charged silica particles. Furthermore, the amended claims now include the negative-charged polynaphthalene surfactant present in the polishing solution, despite the presence of positive-charged particles. This excessive concentration of polynaphthalene surfactant further facilitates control of the slurry's polishing performance. Thus, since Miura et al. fail to disclose that polynaphthalene surfactant adsorbs onto alumina particles to reduce scratching of semiconductor substrates; it operates with negatively charged silica particles; polynaphthalene surfactants will not adsorb onto negatively charged silica particles; and Miura et al. do not disclose the use of negative-charged surfactant in solution in the presence of positive-charged abrasive particles, Applicant respectfully submits that Miura et al. reference does not suggest or render obvious claims 1 to 7, as amended.

Applicant respectfully submits that the amended claims are in proper form for allowance and request reconsideration. If a call would expedite prosecution, please call me at (302) 283-2136.

Respectfully submitted,

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